



Theoretical Computer Science 225 (1999) 195–197

---



---

Theoretical  
Computer Science

---



---

[www.elsevier.com/locate/tcs](http://www.elsevier.com/locate/tcs)

## Contents EATCS Bulletin Number 68, June 1999

|  |     |
|--|-----|
| <b>1. EATCS Matters</b>  |     |
| Letter from the President .....  | 1   |
| Letter from the Bulletin Editor .....  | 2   |
| The French Chapter (by Ph. Schnoebelen, L. Rosaz, G. Kucherov) .....   | 3   |
| The Italian Chapter (by E. Moggi) .....  | 14  |
| <b>2. ICALP</b>  |     |
| Guidelines for ICALP Organization Proposals .....  | 18  |
| ICALP '99, Call for Participations and Conference Program .....  | 20  |
| <b>3. Contents of TCS</b> .....  | 28  |
| <b>4. EATCS Monographs and Texts</b> .....   | 35  |
| <b>5. Institutional Sponsors</b> .....   | 48  |
| IPA – Institute for Programming research and Algorithmics (by T. Borghuis) .....   | 49  |
| <b>6. News from Australia</b> (by J. Staples) .....  | 51  |
| <b>7. News from New Zealand</b> (by C. Calude) .....   | 57  |
| <b>8. News from Latin America</b> (by N. Ziviani) .....  | 59  |
| <b>9. News from India</b> (by P.S. Thiagarajan) .....  | 62  |
| <b>10. Columns</b>   |     |
| E. Allender: The Computational Complexity Column   |     |
| Twelve Problems in Resource-Bounded Measure (by J.H. Lutz, E. Mayordomo) .....   | 64  |
| H. Ehrig: Formal Specification Column  |     |
| On a Reference Model for the Formalization and Integration of Software Specification Languages (by M. Grosse-Rhode) .....      | 81  |
| Y. Gurevich: The Logic in Computer Science Column  |     |
| Why are Modal Logics so Robustly Decidable? (by E. Grädel) .....   | 90  |
| M. Nielsen: The Concurrency Column   |     |
| The Pi-Calculus: Notes on Labelled Semantics (by P. Quaglia) .....   | 104 |
| G. Rozenberg: The Natural Computing Column   |     |
| Why Evolutionary Algorithms (by D.B. Fogel, Z. Michalewicz) .....  | 115 |
| A. Salomaa: The Formal Language Theory Column  |     |
| Many-Valued Truth Functions, Cerný's Conjecture and Road Coloring (by A. Mateescu, A. Salomaa) .....                           | 134 |
| <b>11. Technical Contributions</b>   |     |
| P. Dömösi, S. Okawa, S. Hirose: A Chomsky and Stanley Type Homomorphic Characterization of the Class of Linear Languages ..... | 151 |
| C. Hamzo, V. Kreinovich: On Average Bit Complexity of Interval Arithmetic .....  | 153 |
| J. Honkala: On Chains of Word Equations and Test Sets .....  | 157 |
| P. Turakainen: Injectivity of the Quotient $h \setminus g$ of Two Morphisms and Ambiguity of Linear Grammars .....             | 160 |

12. *Surveys and Tutorials*

|   |     |
|---|-----|
| Unconditional Security in Cryptography – was Shannon too Pessimistic?<br>(by I. Damgård)..... | 166 |
|---|-----|

13. *Reports on Conferences*

|   |     |
|---|-----|
| Workshop on Phase-Transition Phenomena in Combinatorial Problems,<br>Liverpool, United Kingdom, 25–27 January 1999 (report by P.E. Dunne).....  | 180 |
| Third IFIP WG6.1 International Conference on Formal Methods for Open Object-based<br>Distributed Systems (FMOODS '99), Florence, Italy, 15–18 February 1999<br>(report by L. Semini, G. Zavattaro)..... | 189 |
| Sixteenth International Symposium on Theoretical Aspects of Computer Science<br>(STACS '99), Trier, Germany, 4–6 March 1999 (report by M. Kudlek).....  | 192 |
| European Joint Conference on Theory and Practice of Software (ETAPS '99),<br>Amsterdam, The Netherlands, 20–28 March 1999 (report by Y.A. Liu, S.D. Stoller).....                                       | 196 |
| Fourth European Conference on Computational Learning Theory (EuroColt '99),<br>Nordkirchen Castle, Germany, 28–31 March 1999 (report by N. Cesa-Bianchi).....   | 198 |

14. *Conference Announcements*

|  |            |
|--|------------|
| DIMACS Workshops and Events Calendar.....  | 199        |
| Summer School in Semantics of Computation, Aarhus, Denmark, 3–7 May 1999.....  | 203        |
| Fourth International Conference on Developments in Language Theory (DLT '99),<br>Aachen, Germany, 6–9 July 1999.....   | 204        |
| Twelfth International Symposium on Fundamentals of Computation Theory (FCT '99),<br>Iasi, Romania, 30 August–3 September 1999.....   | 207        |
| Annual Conference of the European Association for Computer Science Logic (CSL '99),<br>Madrid, Spain, 20–25 September 1999.....  | 208        |
| British Logic Colloquium, Gregynog, Wales, United Kingdom, 23–25 September 1999.....   | 213        |
| ICLP '99 Workshop on Optimization and Implementation of Declarative Programming<br>Languages (WOID '99), Las Cruces, New Mexico, U.S.A.,<br>29 November–4 December 1999..... | 215        |
| Asian Computing Science Conference (ASIAN '99), Phuket, Thailand,<br>10–12 December 1999.....  | 217        |
| International Symposium on Foundations of Information and Knowledge Systems<br>(FoIKS 2000), Burg (Spreewald), Germany, 14–17 February 2000.....                             | 218        |
| Seventeenth International Symposium on Theoretical Aspects of Computer Science<br>(STACS '2000), Lille, France, 17–19 February 2000.....                                     | 219        |
| Third International Colloquium on Words, Languages and Combinatorics,<br>Kyoto, Japan, 14–18 March 2000.....   | 220        |
| European Joint Conference on Theory and Practice of Software (ETAPS '2000),<br>Berlin, Germany, 25 March–2 April 2000.....   | 221        |
| Eighth International Conference on Algebraic Methodology and Software Technology<br>(AMAST '2000), Iowa City, Iowa, U.S.A., 23–27 May 2000.....                              | 226        |
| Twenty-Fifth International Symposium on Mathematical Foundations of Computer Science<br>(MFCS 2000), Bratislava, Slovak Republic, 28 August–1 September 2000.....            | 230        |
| <b>Twenty-Seventh International Colloquium on Automata, Languages and Programming<br/>(ICALP 2000), Geneva, Switzerland, 9–15 July 2000.....</b>                             | <b>231</b> |

|                                   |     |
|-----------------------------------|-----|
| 15. <i>Agenda of Events</i> ..... | 232 |
|-----------------------------------|-----|

16. *Reports on Computer Science Departments and Institutes*

|   |     |
|---|-----|
| Leiden Center for Natural Computing (LCNC), Leiden University, The Netherlands..... | 236 |
|---|-----|

17. *Abstracts of Ph.D. Theses*

|  |     |
|--|-----|
| M. Bernardo: Theory and Application of Extended Markovian Process Algebra.....                   | 239 |
| C.H.C. Duarte: Proof-Theoretic Foundations for the Design of Extensible<br>Software Systems..... | 245 |

|  |               |
|--|---------------|
| B. Grahlmann: Parallel Programs as Petri Nets .....  | 248           |
| P. Gyzensee: Decidability Questions for Term Rewriting Systems and Tree Transducers .....                                      | 251           |
| J. Järvinen: Knowledge Representation and Rough Sets .....   | 254           |
| T. Pasanen: In-Place Algorithms for Sorting Problems.....  | 258           |
| R.-C. Riemann: Modelling of Concurrent Systems: Structural and Semantical Methods<br>in the High Level Petri Net Calculus..... | 260           |
| 18. <i>Miscellaneous</i>   |               |
| Fundamenta Informaticae: Special offer for the members of EATCS.....   | 263           |
| 19. <i>EATCS Leaflet</i> .....   | 264           |
| 20. <i>Cartoons</i> .....  | 179, 234, 238 |